

Pre-application Report

To: Mr Ian Herbert (on behalf of GR Herbert & Sons)

Pre-application number: EPR/SP3821SZ/P001

West Shaws
Westwick
Barnard Castle
County Durham
DL12 8UT

Date Completed – 23/04/2024

Thank you for seeking advice before submitting an application for an Environmental Permit.

We have completed an initial ammonia screening assessment for your proposal to identify if you will need to submit a detailed modelling assessment with your application.

The screening assessment is based on your proposal to operate a farm which is permitted to stock 3,200 production pigs over 30 kg.

Summary of the assessment:

The ammonia screening results carried out by the Environment Agency are only intended to apply to any EPR permit application and not for use in local council planning submissions.

Based on the information you have provided you will need to submit detailed modelling with your application. Further information about the screening results is provided in detail in Annex 1.

It will generally be necessary to employ experienced consultants to undertake this work. For more information about consultants you could contact your industry body representative or refer to the ENDS Directory:

<http://www.endsdirectory.com/>

A useful guide to choosing and using an environmental consultant can be found on the government's online resource for businesses 'Business Link':

<http://webarchive.nationalarchives.gov.uk/20120823131012/http://www.businesslink.gov.uk/bdotg/action/detail?itemId=1079422318&type=RESOURCES>

When completed, please include the detailed modelling report and supporting modelling files with your H1 Environmental Risk Assessment and submit these with your completed application form to the address given below.

For an example H1 Environmental Risk Assessment refer to the example Intensive Farming EPR application available on the national archives for Environment Agency Website:

<http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/business/sectors/40057.aspx>

The Nature Conservation, Landscape and Heritage Factsheet screening lists all the sites that we currently consider when screening. The table details the supporting legislation and policies and the lead organisations for the protected area / species. Please note not all the sites listed are relevant to the Intensive Farming sector.

It is available on the Environment Agency website:

<http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/geho0612burd-e-e.pdf>

Applying for your permit

You will need to complete application form part B3.5:

<https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-b35>

Your application should be emailed to:

PSC@environment-agency.gov.uk

or sent to:

Environment Agency Permitting and Support Centre
Environmental Permitting Team
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

If you need further information about this screening assessment or applying for your permit please email us at the following address:

preapplicationservice@environment-agency.gov.uk

Pre-application nature conservation data are correct at the time of screening. We will consider all nature conservation sites using best available information at the time of permitting. Our GIS data are updated regularly, and we are occasionally made aware of additional nature conservation sites by other organisations which we will consider when determining a permit.

The Environment Agency takes care to ensure that the conclusions of the screening assessment are correct at the time of preparation but reserves the right to change the basis of the assessment in the light of technical developments or changes in Environment Agency procedures.

Annex 1 Ammonia Screening Results

Screening Input

Grid Reference used for the assessment: 408175, 515823 (with a 55m buffer)

Animal numbers and types

Animal numbers and types, housing systems, manure and slurry storage assessed are listed below. The animal numbers and emission factors are based on an interpretation of the information provided by the applicant during the pre-application process and have been used in this initial risk assessment to identify if modelling is necessary.

It is strongly recommended that the numbers of animal places by category, ventilation type and housing system is reviewed, and appropriate emission factors are assigned before undertaking the detailed modelling assessment.

Category of livestock	Housing system	Number of animal places	Ammonia emission factor (kg NH ₃ /animal place/year)
Pigs > 30kg and unserved gilts	FSF	1,800	4.14 **
	Roof ventilation only (vents greater than 5.5 metres high, fan efflux velocity at or greater than 8.5 m/s)* Side ventilation, natural or combination ventilation (note this includes tunnel ventilation and cross ventilation)	1,400	4.14**

* this can include gable end fans that are used for heat extraction only during the summer months.

**please refer to BAT 30 a 0 of the BAT conclusions for the intensive rearing of poultry and pigs: In order to reduce ammonia emissions to air from each pig house, a deep pit (in case of a fully or partly slatted floor) is only BAT if used in combination with an additional mitigation measure, e.g.:

- a combination of nutritional management techniques;
- air cleaning system;
- pH reduction of the slurry;
- slurry cooling.

However, this technique is not applicable to new plants (which West Shaws will be classed as), unless a deep pit is combined with an air cleaning system, slurry cooling and/or pH reduction of the slurry.

Manure Storage – no manure stored on site.

Slurry Storage – slurry is currently stored under the slats (see note** above).

If you decided to alter your proposal by increasing the number of animal places or by changing the animal housing type or by increasing the manure or slurry storage you should include these changes in your modelling report.

Screening Overview

This screening assessment has considered any Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites within 5km, any Sites of Special Scientific Interest (SSSIs) within 5km and also any National Nature Reserves (NNRs), Local Nature Reserves (LNRs), ancient woodlands and Local Wildlife Sites (LWSs) within 2km of the farm.

We have used the Environment Agency's Ammonia Screening Tool (AST v4.6) to assess the impact of your proposal at those sites identified within the above distance criteria.

We have applied a two-stage screening criteria to the ammonia screening tool results:

For SACs, SPAs, Ramsar sites and SSSIs, the screening assessment has taken into account other intensive farms that could act in-combination with the proposal, where applicable.

Where the ammonia screening tool predicts that emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) will be <Y% (see Table 1 below) of the relevant critical level (CLE) (ammonia) or critical load (CLO) (nutrient nitrogen or acid), the proposal screens out of the requirement for an ammonia assessment.

Further modelling is required where:

- emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are in excess of Z% of the relevant CLE or CLOs at any SSSIs and/or other nature conservation sites (e.g. NNRs, LNRs, LWSs, ancient woodlands)
- emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are in excess of Y% of the relevant CLE or CLOs for any SACs, SPAs or Ramsar sites
- there is the potential for an in-combination effect with existing farms at any SSSIs if emissions are > Y% of the relevant CLE or CLOs
- the proposal is within 250m of any nature conservation sites

Table 1 Screening thresholds

Designation	Y%	Z%
SAC, SPA, Ramsar	4	n/a
SSSI	20	50
NNR, LNR, LWS, ancient woodland	100	100

Screening Results

The nature conservation site listed in the tables below requires detailed modelling as the emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) is/are predicted to be > Z% of the relevant CLe (ammonia) or CLos (nutrient nitrogen or acid). Detailed modelling is therefore required to assess the impact of airborne ammonia at the following sites:

Table 2 Assessment of ammonia emissions

Site Name	Designation / Status	Ammonia Critical Level ($\mu\text{g}/\text{m}^3$)	Process contribution (PC) ($\mu\text{g}/\text{m}^3$)	PC as % Critical Level
Sally Gill Plantation	AW	3	7.662	255.4

Table 3 Assessment of nutrient nitrogen deposition

Site Name	Designation / Status	Nutrient Nitrogen Critical Load (kg N/ha/yr)	Process contribution (PC) (kg N/ha/yr)	PC as % Critical Load
Sally Gill Plantation	AW	10	39.795	398

Table 4 Assessment of acid deposition

Site Name	Designation / Status	Acid Critical Load (keq/ha/yr)	Process contribution (PC) (keq/ha/yr)	PC as % Critical Load
Sally Gill Plantation	AW	1.73	2.842	164.3

How we decided the sensitivity of the nature conservation site

Relevant critical loads were obtained from the [Air Pollution Information System](#).

Relevant critical levels were assigned using the best information available at the time from our internal mapping and data application.

We have attached a checklist to this report which you can choose to send to the local authority ecological team, local wildlife trust or local forestry commission to ask for further information about local wildlife sites (LWSs) or ancient woodlands which require modelling. The checklist includes questions about the LWS or ancient woodland to establish their sensitivity and relevance for inclusion within the impact assessment from ammonia emissions. It is possible that these sources

will not be able to provide all the required information. If this is the case modelling will be required as outlined earlier in this report.

Permitting Outcomes

For NNRs, LNRs, LWSs and ancient woodlands a permit may be issued where the ammonia screening tool or detailed modelling demonstrates that:

- the process contribution is <100% of the relevant CLe and/or CLoS.

Proposing ammonia emission reduction techniques

Where your modelling indicates the predicted process contribution is greater than the allowable thresholds, your assessment and application should include ammonia reduction techniques* to reduce the contribution to the allowable thresholds.

Where these criteria can not be met a detailed assessment of the proposal will be carried out by the Environment Agency.

For SACs, SPAs, Ramsar sites and SSSIs, we will need to consult with Natural England before the determination of the application can be completed.

Factsheets and guidance about ammonia emissions to the atmosphere and nature conservation, the Environment Agency's assessment process and how to model ammonia emissions from intensive farms can be found on our website at: <http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/business/sectors/40071.aspx>

*Please note: for SACs, SPAs and Ramsar sites where additional checks are required during determination, further reduction of ammonia emissions may be required.